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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,135	06/30/2000	Jan-Dieter Spalink	EXP.209A	9698

20995 7590 08/12/2008
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EXAMINER

DINH, MINH

ART UNIT	PAPER NUMBER
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2132

NOTIFICATION DATE	DELIVERY MODE
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08/12/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/608,135	Applicant(s) SPALINK ET AL.	
	Examiner MINH DINH	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 28-30 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) 32-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment filed 05/08/08. Claim 1 has been amended; claim 31 has been canceled; new claims 32-35 have been added.

Response to Arguments

2. Applicant's arguments filed 05/08/08 have been fully considered but they are not persuasive. With respect to the amended claim 1, Applicant argues that Rupp et al. ("INDEX: A Platform for Determining how People Value the Quality of their Internet Access") fails to teach updating a profile record in a database for each anonymized identifier based on the data collected by the collection engine, wherein the data indicates a set of communications for a session between a host and the one or more users that are identified by the anonymized identifier (last paragraph of page 5 through first paragraph of page 6).

Rupp discloses a method and system for performing a series experiments over a 2-year period to determine how individuals value Internet usage when offered different Quality of Service (QoS) choices (Abstract). Specifically, Rupp discloses collecting data for each TCP connections aggregated by an anonymized user ID for subsequent offline analysis, and that data is collected to only to record when users change their QoS choice, but also to infer what parameters influence these decisions and what the reasons for these changes are (section 2.2, third paragraph). Although Rupp does not explicitly disclose a profile record in a database for each anonymized identifier and updating the profile record based on the collected data, this feature is deemed to be

inherent to the Rupp's system as Rupp discloses that the fee structure changes weekly or daily and that varying the prices during individual sub-experiments allow for measuring the demand response for each participant using the collected data (section 3.3, first paragraph). In order for the Rupp's system to learn the behavior of each participant, there must be a profile record for each participant (represented by his/her anonymized user ID) to record the participant's demand response and the profile record must be updated as different responses come with different fee structures introduced over a period of time. In addition, it is well known to store data in database to facilitate data update and retrieval. Therefore, it would have been obvious to store the participant's profile record in a database to facilitate data update and retrieval.

Election/Restrictions

3. Newly submitted claims 32-35 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 32-35 are directed to a device for aggregating information about use of computer networks whereas the existing claims are directed to a method performed by a computer system for collecting network usage data. The inventions are related as subcombinations disclosed as usable together in a single combination (fig. 5, aggregation server 501 and collection engine 103), and each subcombination has separate utility.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 32-35 are withdrawn from consideration

as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-13 and 28-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended claim 1 recite the added limitation “updating a profile record in a database for each anonymized identifier based on the data collected by the collection engine, wherein the data indicates a set of communications for a session between a host and the one or more users that are identified by the anonymized identifier.” Whereas the originally filed disclosure discloses creating user behavior profiles (Specification: p. 4, line 7; p. 5, lines 2-3; p. 7, lines 20-21), it does not disclose updating a profile record as recited in claim 1. Therefore, the limitation is considered new matter.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-5 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp et al. ("INDEX: A Platform for Determining how People Value the Quality of their Internet Access") in view of Gabber et al (5,961,593).

Regarding claim 1, Rupp discloses a method comprising: obtaining an identifier representing one or more users of a computer network at a network service provider, i.e., a supervisor node which determines who has access to which service (section 2.1, second paragraph); creating an anonymized identifier associated with the obtained identifier; collecting data being transmitted across the computer network at a collection engine (i.e., a billing gateway) connected to the network service provider; associating the anonymized identifier with the collected data; and storing the transaction record in a database at the network service provider (fig. 1; section 2.1; section 2.2, third paragraph).

Rupp discloses that an anonymized identifier associated with the obtained identifier is created; however, Rupp does not disclose how the anonymized identifier is created. Gabber discloses creating an anonymized identifier using an obtained identifier (see Abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Rupp method such that the anonymized identifier is created using the obtained identifier, as taught by Gabber, so that the same user will be recognized by a consistent anonymized identifier (Abstract).

Rupp does not explicitly disclose a profile record in a database for each anonymized identifier and updating the profile record based on the collected data;

however, this feature is deemed to be inherent to the Rupp's system as Rupp discloses that the fee structure changes weekly or daily and that varying the prices during individual sub-experiments allow for measuring the demand response for each participant using the collected data (section 3.3, first paragraph). In order for the Rupp's system to learn the behavior of each participant, there must be a profile record for each participant (represented by his/her anonymized user ID) to record the participant's demand response and the profile record must be updated as different responses come with different fee structures introduced over a period of time. Official Notice is taken that both concept and advantage of storing data in database to facilitate data update and retrieval are well known and expected in the art. Therefore, it would have been obvious to store the participant's profile record in a database to facilitate data update and retrieval.

Regarding claims 4 and 5, Gabber further discloses that that the anonymized identifier is created by applying a one-way hashing function to the obtained identifier and a value, which meets the limitation of a security key (col. 9, lines 9 and 23-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of Rupp such that the anonymized identifier is created by applying a one-way hashing function to the obtained identifier and a security key, as taught by Gabber. Please refer to motivation recited for creating the anonymized identifier using the obtained identifier as taught by Gabber in claim 1.

Regarding claim 28, Rupp further discloses that the collection engine is a passive device that monitors network traffic, collects data and records the collected data in a database (section 2.1; section 2.2, third paragraph).

Regarding claim 29, Rupp further discloses creating online behavioral profiles (i.e., measurement of user demand for Internet access as a function of Quality of Service, pricing structure, and application) unassociated with individual users (utilizing anonymized user ID), with the collection engine (Abstract; section 2.2, third paragraph).

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 1 above, and further in view of Astrom et al. (6,134,441). Rupp and Gabber do not disclose that the identifier representing the user is an MSISDN. Astrom discloses that an MSISDN is a unique identifier (col. 1, lines 56-61). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber such that the obtained identifier is a MSISDN, as taught by Astrom, because it is a unique identifier representing a subscriber in GSM networks (col. 1, lines 56-61).

9. Claims 3 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 1 above, and further in view of Ball et al. (6,446,200).

Regarding claim 3, Rupp and Gabber do not disclose that the obtained identifier is a static IP address. Ball discloses that a static IP address is a unique identifier (col.

14, lines 3-8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber such that the obtained identifier is a static IP address, as taught by Ball, because it is a unique identifier representing a network component (col. 14, lines 3-8).

Regarding claims 10, Rupp and Gabber in claim 1 do not disclose that the step of obtaining an identifier representing one or more users of a computer network includes: receiving packets sent by an authentication server and extracting an identifier from the received packets. Ball discloses a method for collecting data usage network comprising the steps of receiving packets sent by an authentication server and extracting an identifier from the received packets (see fig. 1 and col. 9, line 17). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber to include the steps of receiving packets sent by an authentication server and extracting an identifier from the received packets, as taught by Ball, so that data of various types and formats can be handled (col. 3, lines 32-35). Accordingly, the receiving and extracting are performed at the network service provider.

Regarding claims 11-12, they differ from claim 10 in that the authentication server is a RADIUS server and that the received packets are RADIUS packets. Ball further discloses that the authentication server is a RADIUS server and the received packets are RADIUS packets (see fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of claim 10 such that the authentication server is a RADIUS server and the received packets are

RADIUS packets, as taught by Ball, because RADIUS is a well-accepted standard in the industry and is used across a number of different types of technologies (col. 3, lines 48-51).

Regarding claim 13, Rupp and Gabber do not disclose that the authentication server is a DHCP server. Ball discloses that the authentication server is a DHCP server (see fig. 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber such that that the authentication server is a DHCP server, as taught by Ball, so that data of various types and formats can be handled (col. 3, lines 32-35).

10. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 5 above, and further in view of Schneier ("Applied Cryptography").

Regarding claim 6, Rupp and Gabber do not disclose that the one-way hashing function is the SHA. Schneier discloses that SHA is a one-way hashing function (section 18.7, page 442). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber such that the one-way hashing function is the SHA, as taught by Schneier, because the algorithm is used in the Secure Hash Standard and is required for Federal applications not requiring a digital signature (section 18.7, page 442).

Regarding claim 7, Rupp and Gabber do not disclose that the one-way hashing function is the MD4 algorithm. Schneier discloses that the MD4 algorithm is a one-way

hashing function (section 18.4, page 436). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber such that the one-way hashing function is the MD4 algorithm, as taught by Schneier, for better performance and simplicity (section 18.4, page 436).

Regarding claim 8, Rupp and Gabber do not disclose that the one-way hashing function is the MD5 algorithm. Schneier discloses that the MD5 algorithm is a one-way hashing function (section 18.5, page 436). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber such that the one-way hashing function is the MD5 algorithm, as taught by Schneier, because it is an improved version of MD4 (section 18.5, page 436).

Regarding claim 9, Rupp and Gabber do not disclose that the one-way hashing function is the DES algorithm. Schneier discloses that the DES algorithm can be used as a one-way hashing function (section 18.11, pages 446-447). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber such that the one-way hashing function is the DES algorithm, as taught by Schneier. The motivation for doing so would have been to use a symmetric block cipher algorithm as an alternative to other one-way hash functions (section 18.11, page 446).

11. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rupp in view of Gabber as applied to claim 28 above, and further in view of Schweitzer et al.

(6,947,984). Rupp discloses multiple collection engines (i.e., a set of billing gateways) (fig. 1; section 2.1). Rupp does not disclose utilizing an aggregation server to configure and manage said multiple collection engines and aggregate collected data. Schweitzer discloses utilizing a central event manager (CEM) to configure and manage multiple collection engines (i.e., gatherers) and aggregate collected data, the CEM being functionally equivalent to the claimed aggregation server (Abstract; fig. 1, elements 170, 161-165, 175; col. 6, lines 24-31; col. 7, line 51 - col. 8, line 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined method of Rupp and Gabber to utilizing a CEM, which reads on an aggregation server, to configure and manage said multiple collection engines and aggregate collected data, as taught by Schweitzer. The motivation for doing so would have been to provide centralized, efficient management and controls of the collection engines (col. 7, lines 52-54).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,754,939 to Herz et al.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH DINH whose telephone number is (571)272-3802. The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. D./
Examiner, Art Unit 2132

07/30/08

/Benjamin E Lanier/
Primary Examiner, Art Unit 2132